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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/997,511	11/29/2001	Doron Cohen	IL920010047US1	4997

7590

01/07/2005

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EXAMINER

PHAN, TAM T

ART UNIT

PAPER NUMBER

2144

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/997,511

Applicant(s)

COHEN ET AL.

Examiner

Tam (Jenny) Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 01/14/2001.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This application has been examined. Claims 1-17 are presented for examination.

#### ***Priority***

2. No priority claims have been made.
3. The effective filing date for the subject matter defined in the pending claims in this application is 11/29/2001.

#### ***Information Disclosure Statement***

4. An initialed and dated copy of Applicant's IDS form 1449, Received on 01/14/2002, is attached to the instant Office action.

#### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mao et al. (U.S. Patent Number 6,546,385), hereinafter referred to as Mao, in view of Tripp et al. (U.S. Patent Number 6,516,337), hereinafter referred to as Tripp.

7. Regarding claim 1, Mao disclosed a method for indexing text on a personal digital assistant (PDA) (Figures 1, 4, column 2 lines 31-36, lines 51-56, column 5 lines 31-54), the method comprises the steps of: transferring documents from said PDA to an off line mediary (column 3 lines 43-58, column 4 lines 24-34, column 5 lines 31-54); creating off-line, from said

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documents, a static index (column 3 lines 43-58, column 4 lines 35-47); and transferring said off-line static index to said PDA (Figure 6, column 6 lines 5-25).

8. Mao taught the invention substantially as claimed. However, Mao did not expressly teach processing of dynamic documents.

9. Mao suggested exploration of art and/or provided a reason to modify the method with additional feature to include processing of dynamic documents [web pages] (Figure 4 sign 430, column 4 lines 24-34, column 8 lines 32-39).

10. Tripp disclosed a method for processing and indexing dynamic documents [web pages] (column 1 lines 45-60, column 3 lines 35-52).

11. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the method of Mao with the teachings of Tripp to include processing of dynamic documents in order to provide accurate information about each dynamic document (column 1 lines 49-51) since the Internet has experienced exponential growth in the number of dynamic documents in the last several years (column 1 lines 14-16).

12. Regarding claim 2, Mao disclosed a method wherein said intermediary is selected from the group consisting of a desktop, a server, and a web server (Figure 4, column 5 lines 31-54).

13. Regarding claim 3, Tripp disclosed a method further comprising the step of: updating said off-line static index with said dynamic documents that have been modified, added, or deleted after said step of creating, and from time to time, transferring said off-line updated static index to said PDA [local master index server] (Abstract, Figure 3, column 2 lines 50-65).

14. Regarding claim 4, Tripp disclosed a method wherein said from time to time is synchronization of said PDA [local master index server] with said off-line intermediary (column 1 lines 38-51, column 2 lines 50-65).
15. Regarding claim 5, Tripp disclosed a method further comprising the step of: indexing on-line a dynamic index of said dynamic documents (column 3 lines 35-52, column 10 line 62-column 11 line 14).
16. Regarding claim 6, Mao and Tripp combined disclose a method for searching text on a personal digital assistant (PDA) (Mao, Figures 1, 4, column 2 lines 31-36, lines 51-56, column 5 lines 31-54), the method comprises the steps of: searching an on-line static index and compiling therefrom static search results (Mao, column 3 lines 43-58, column 4 lines 35-47, column 5 lines 31-54); searching a dynamic index and compiling therefrom dynamic search results (Tripp, Figure 5, column 3 lines 35-52); and merging said static search results with said dynamic search results (Tripp, Figures 3, 5, column 1 lines 38-51, column 2 lines 50-65).
17. Regarding claim 7, Mao and Tripp combined disclose a method for indexing and searching text on a personal digital assistant (PDA) (Mao, Figures 1, 4, column 2 lines 31-36, lines 51-56, column 5 lines 31-54), the method comprises the steps of: creating off-line a static index of dynamic documents for transfer to said PDA (Mao, column 3 lines 43-58, column 4 lines 35-47); and searching on said PDA, said static index and an on-line dynamic index, wherein said step of creating is independent from said of searching (Mao, column 3 lines 43-58, column 4 lines 35-47; Tripp, column 3 lines 35-52, column 6 lines 46-52).
18. Regarding claim 8, Mao and Tripp combined disclose a method for indexing text on a personal digital assistant (PDA) (Mao, Figures 1, 4, column 2 lines 31-36, lines 51-56, column 5

lines 31-54), the method comprises the steps of: creating off-line a static index (Mao, column 3 lines 43-58, column 4 lines 35-47); transferring said off-line static index to said PDA (Mao, Figure 6, column 6 lines 5-25); from time to time, updating said off-line static index with dynamic text from said PDA (Tripp, Abstract, Figure 3, column 2 lines 50-65); and updating said on-line static index with said updated off-line static index (Tripp, column 1 lines 38-51, column 2 lines 50-65).

19. Regarding claim 9, Mao and Tripp combined disclose a method wherein said dynamic text is text on said PDA that has been added or modified after said step of creating (Mao, Figures 1, 4, column 5 lines 31-54; Tripp, column 1 lines 38-51, column 2 lines 50-65)

20. Regarding claim 10, Tripp disclosed a method further comprising the step of: creating an on-line dynamic index from said dynamic text (column 3 lines 35-52).

21. Regarding claim 11, Tripp disclosed a method further comprising the steps of: detecting when the dynamic index exceeds predefined limits; and sending a signal (column 7 lines 20-35, column 11 lines 4-14, column 17 lines 38-46).

22. Regarding claim 12, Tripp disclosed a method wherein said signal comprising a warning to generate a new, merged static index (column 5 lines 62-65, column 9 lines 43-56).

23. Regarding claim 13, Tripp disclosed a method wherein said predefined limits are selected from the group consisting of predefined limits for search time, document capacity, or number of dynamic document (column 6 lines 46-52, column 7 lines 32-35).

24. Regarding claim 14, Mao and Tripp disclosed a personal digital assistant (PDA) comprising: an updatable static index (column 3 lines 43-58, column 5 lines 31-54); and a dynamic index (Tripp, column 2 lines 50-65, column 3 lines 35-52).

25. Regarding claim 15, Mao disclosed a PDA wherein said updatable static index is created off-line (column 3 lines 43-58, column 5 lines 31-54).
26. Regarding claim 16, Mao and Tripp combined disclose a PDA further comprising: a search engine for searching said static index (Mao, column 7 lines 6-21) and said dynamic index (Tripp, column 1 lines 52-60, column 3 lines 35-52).
27. Regarding claim 17, Tripp disclosed a PDA further comprising: an on-line indexer for creating said dynamic index (column 3 lines 35-52, column 8 line 60-column 9 line 10).
28. Since all the limitations of the claimed invention were disclosed by the combination of Mao and Tripp, claims 1-17 are rejected.

### *Conclusion*

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Bhargava et al. (U.S. Patent Number 5978792) disclosed a method and apparatus for generating static, dynamic and hybrid sparse indices for use with workfiles used by SQL queries in a relational database management system. A dynamic sparse index is constructed during the search phase of workfile. For every data value of an outer probing sequence, the dynamic sparse index is first probed to determine the starting location of the next search in the workfile. A hybrid sparse index is comprised of two parts: (1) a static part which is never changed and is built during the merge phase of workfile creation, and (2) a dynamic part that is similar to the dynamic sparse index described above and is created during the search phase of workfile access. The hybrid sparse index is based on the dynamic sparse index, except that entries in a static portion of the hybrid

sparse index never change, while entries in a dynamic portion of the hybrid sparse index are updated in a manner similar to that described above.

b. Mathur et al. (U.S. Patent Number 6581072) disclosed a user system receives index information comprising information related to documents stored in a network environment. The index information is then used to identify and access documents of interest to the user. The identification of documents of interest to the user is performed on the user system thus obviating the need to provide any information to search engines executing on remote servers. Index server may itself be configured to generate an index for information stored by computer systems coupled to communication network. For example, index server may use spiders and crawlers to collect information related to documents accessible via communication network and build an index based on the collected information. Index server may then communicate the generated index to user system. Since relevant web pages are identified based on index information which is locally stored on user system, user system does not have to be connected to communication network during the identification process, i.e. the index information received by user system can be searched and web pages of interest to the user can be identified in an offline manner. Computer system itself can be of varying types including a personal computer, a portable computer, a workstation, a computer terminal, a network computer, a mainframe, a kiosk, a personal data assistant (PDA), a communication device such as a cell phone, or any other data processing system.

c. Hubbard (U.S. Patent Number 6654783) disclosed a method for indexing network site content and associated distributed parallel processing system are disclosed that



identifies the capabilities of distributed devices connected together through a wide variety of communication systems and networks and utilizes those capabilities to provide incentives to the distributed devices and to organize, manage and distribute project workloads to the distributed devices.

d. Wang Baldonado (U.S. Patent Number 6704722) disclosed a systems and method for allowing users to perform localized searching from a standard web browser. In particular, the systems and methods of this invention use a two-prong approach to accomplish both a dynamic breadth-first crawl search and a contextualize index search to generate search results. The search results are then assembled in a unified results page and displayed to a user.

30. Refer to the enclosed PTO-892 for details and complete listing of other pertinent prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tam (Jenny) Phan whose telephone number is (571) 272-3930. The examiner can normally be reached on M-F 9:00-5:00.

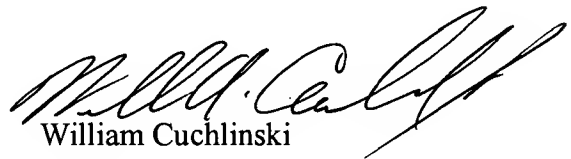
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Cuchlinski can be reached on (571) 272-3925. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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SPE

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